

AFTERWORK DATA SCIENCE

DATA VISUALISATION WITH PYTHON

AGENDA

10 MIN

Learning Outcomes + Introduction

2 HRS

Part 1: Introduction to Matplotlib (Practice)

2 HRS

Part 2: Introduction to Seaborn (Practice)

10 MIN

Checkout Form



AfterWork

LEARNING OUTCOMES

- I can create basic visualizations such as **tables, bar charts, histograms, box plots, pie charts** and **line graphs** to enhance audience comprehension of findings and insights.
- I can create advanced visualisations such as **heat maps, scatter plots** and **pair plots** to describe the statistical characteristics of a dataset.

OVERVIEW

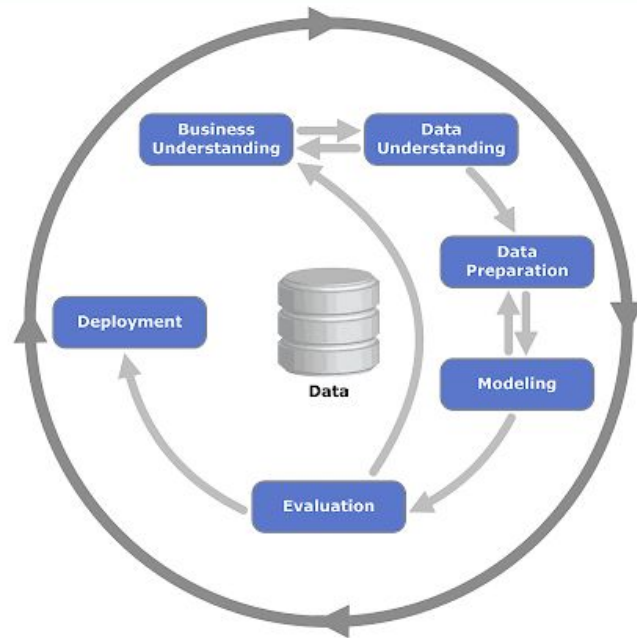
Data visualization refers to the graphical representation of information and data by using visual elements like charts, graphs, timelines, and maps data.

Benefits

- It provides the ability to act on emerging trends faster.
- It helps visualize relationships and pattern in business operations.
- It helps to understand customer/users trends quickly and efficiently.
- It helps manage business finances.

Data Visualisation with Python

CRISP-DM



AfterWork

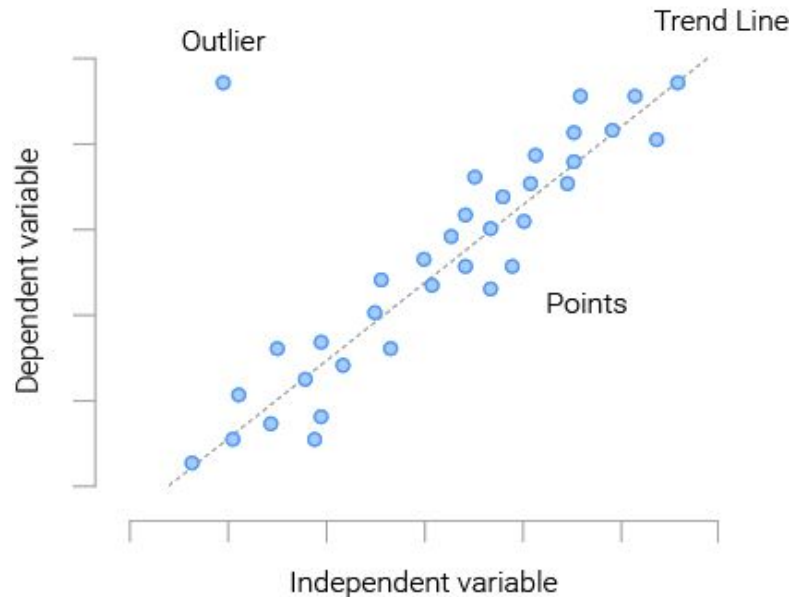
WHY PYTHON?

- **Primary language**
- **Specificity**
- **Documentation**
- **Ecosystem** (Pandas, Matplotlib, Seaborn, Plotly, Bokeh, Dash etc.)
- **Use cases:** Reports, Data Exploration and Dashboards.

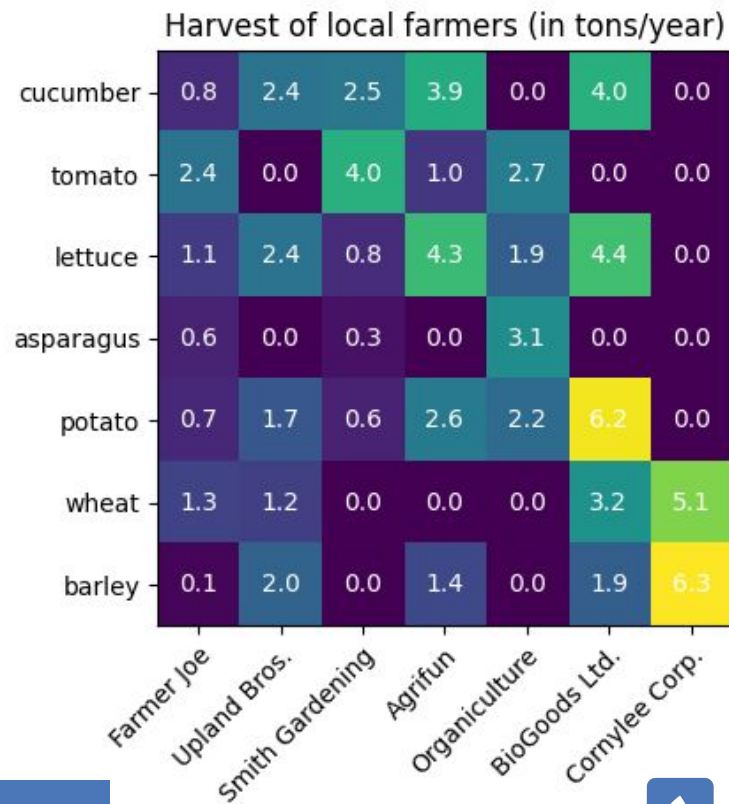
Visualisations

- **Scatterplot:** Determines the relationship between two numerical variables.
- **Heatmap:** Visualisation where the individual values contained in a matrix are represented as colors.
- **Box plot:** Shows the spread and centers of a data set.
- **Pairplot:** Shows the distribution of single variables and relationships between two variables.

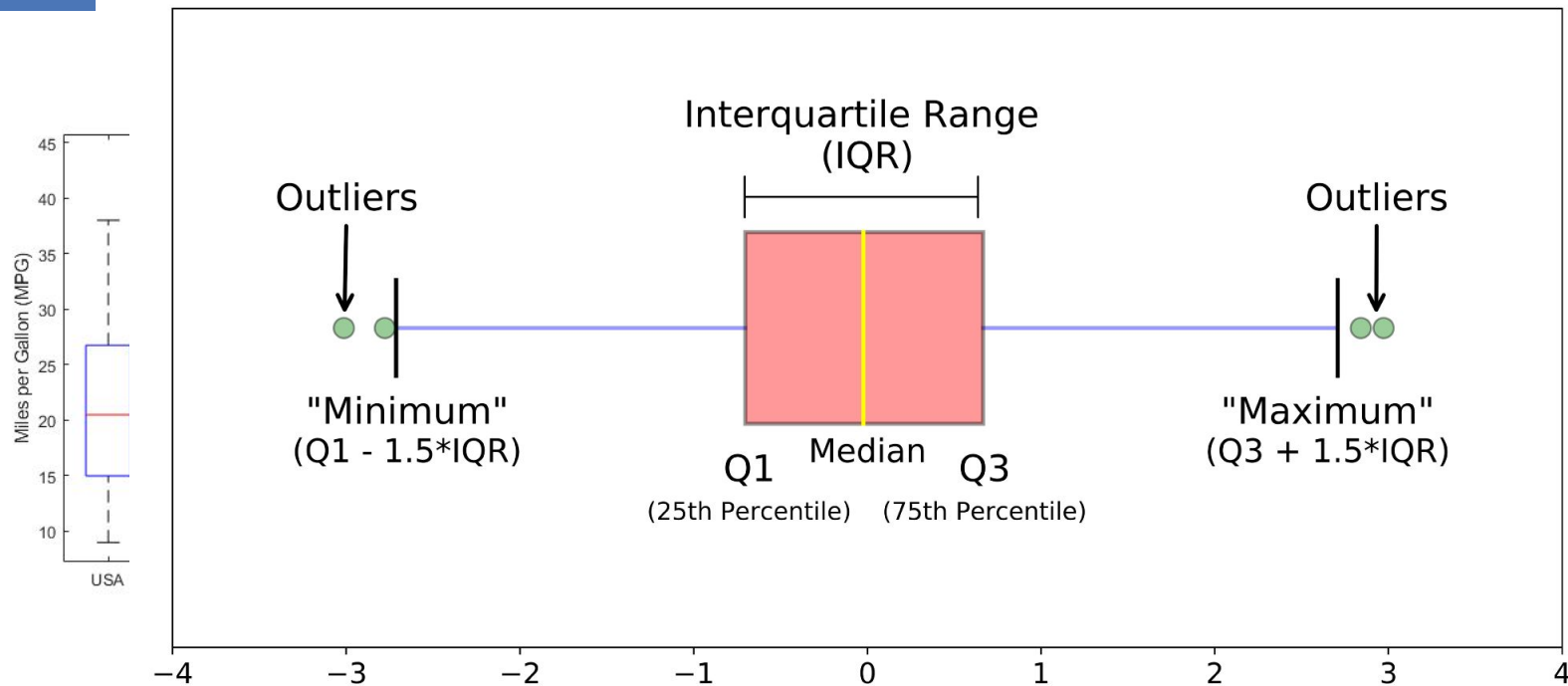
Scatterplot



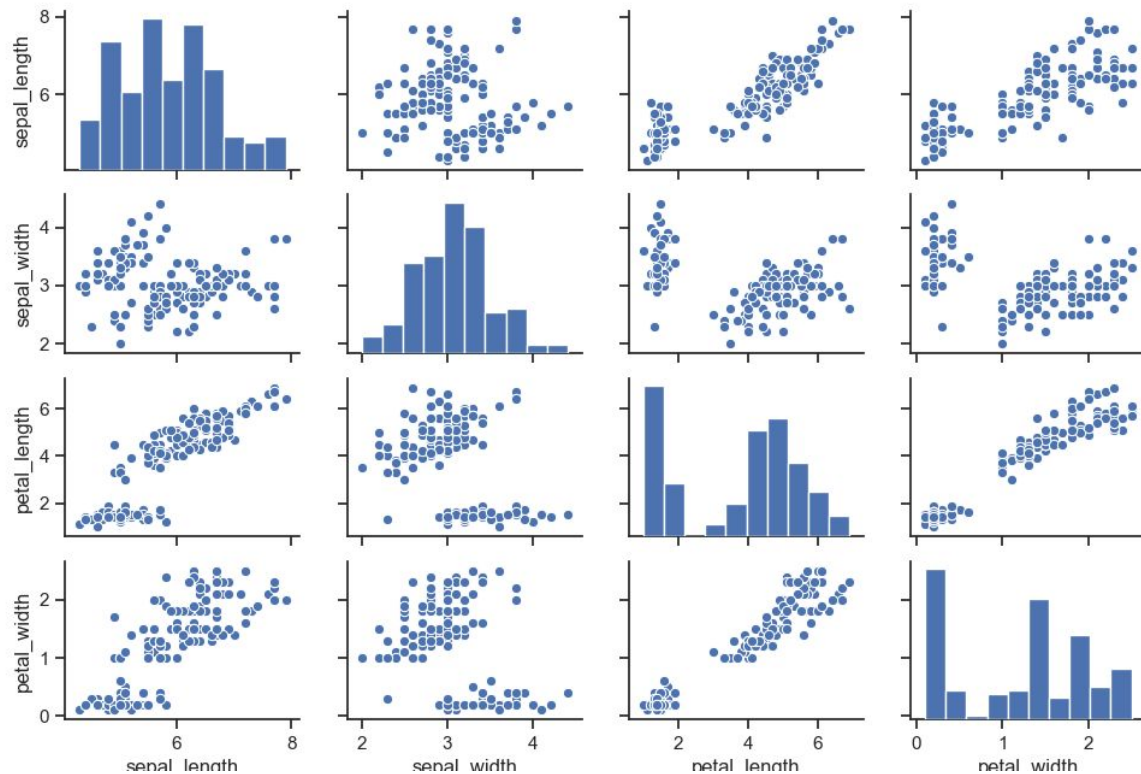
Heatmap



Box Plot



Pair Plot



PRACTICE: 4 HRS

Data Visualisation with Matplotlib

<https://bit.ly/DataVisualisationMatplotlib>

Data Visualisation with Seaborn

<https://bit.ly/DataVisualisationSeaborn>

Data Visualisation with Python



AfterWork

FEEDBACK FORM

Data Visualisation with Python